

**WHAT IS CLAIMED IS:**

- 1     1.     A method of providing IP telephony services, which comprises the steps of:  
2             mapping a telephony signaling protocol called party number nature of address indicator to  
3     an Internet signaling protocol nature of address indicator; and  
4             mapping a telephony signaling protocol called party number numbering plan indicator to  
5     an Internet signaling protocol numbering plan indicator.
  
- 1     2.     The method as claimed in claim 1, wherein said Internet signaling protocol is session  
2     initiation protocol.
  
- 1     3.     The method as claimed in claim 2, wherein said Internet protocol nature of address  
2     indicator and said Internet protocol number plan indicator are contained in an invite request.
  
- 1     4.     The method as claimed in claim 1, wherein said telephony signaling protocol is SS7.
  
- 1     5.     The method as claimed in claim 4, wherein said telephony signaling protocol is ISUP.
  
- 1     6.     The method as claimed in claim 1, wherein said telephony signaling protocol is ISDN.
  
- 1     7.     The method as claimed in claim 1, wherein said telephony signaling protocol is CAS.
  
- 1     8.     The method as claimed in claim 5, wherein said telephony protocol nature of address  
2     indicator and said telephony protocol number plan indicator are contained in an initial address  
3     message.

1 9. A method of providing telephony services, which comprises the steps of:  
2 receiving a call setup message in a first signaling protocol at a gateway between a first  
3 network and a second network, said call setup message including a called party number, said  
4 called party number including a numbering plan indicator and a nature of address indicator; and  
5 generating a call setup message in a second signaling protocol at said gateway between  
6 said first network and said second network, said call setup message in said second signaling  
7 protocol including said called party number, said called party number including said numbering  
8 plan indicator and said nature of address indicator.

1 10. The method as claimed in claim 7, wherein said first network is a public switched  
2 telephone network and said second network is an IP network.

1 11. The method as claimed in claim 8, wherein said first signaling protocol is SS7 and said  
2 second signaling protocol is session initiation protocol.

1 12. The method as claimed in claim 9, wherein call setup message in said first protocol is an  
2 initial address message and said call setup message in said second protocol is an invite request.

1 13. The method as claimed in claim 7, wherein said first network is an IP network and said  
2 second network is a public switched telephone network.

1 14. The method as claimed in claim 11, wherein said first signaling protocol is session  
2 initiation protocol and said second signaling protocol is SS7.

1 15. The method as claimed in claim 11, wherein said first signaling protocol is session  
2 initiation protocol and said second signaling protocol is ISDN.

1 16. The method as claimed in claim 11, wherein said first signaling protocol is session  
2 initiation protocol and said second signaling protocol is CAS.

1     17.     The method as claimed in claim 12, wherein call setup message in said first protocol is an  
2     invite request and said call setup message in said second protocol is an initial address message.

1     18.     An IP telephony gateway, which comprises:  
2             means for mapping a telephony signaling protocol called party number nature of address  
3     indicator to an Internet signaling protocol nature of address indicator; and  
4             means for mapping a telephony signaling protocol called party number numbering plan  
5     indicator to an Internet signaling protocol numbering plan indicator.

1     19.     The IP telephony gateway as claimed in claim 14, wherein said Internet signaling protocol  
2     is session initiation protocol.

1     20.     The IP telephony gateway as claimed in claim 15, wherein said telephony signaling  
2     protocol is SS7.

1     21.     The IP telephony gateway as claimed in claim 15, wherein said telephony signaling  
2     protocol is ISDN.

1     22.     The IP telephony gateway as claimed in claim 15, wherein said telephony signaling  
2     protocol is CAS.

1     23.     The IP telephony gateway as claimed in claim 16, wherein said telephony signaling  
2     protocol is ISUP.

1     24.     The IP telephony gateway as claimed in claim 14, comprising:  
2             means for mapping an Internet signaling protocol called party number nature of address  
3     indicator to a telephony signaling protocol nature of address indicator; and  
4             means for mapping an Internet signaling protocol called party number numbering plan  
5     indicator to a telephony signaling protocol numbering plan indicator.